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# INFORMATION DISCLOSURE STATEMENT BY APPLICANT

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## U.S. PATENT DOCUMENTS

Examiner Initials *	Cite No. 1	Document Number	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Number - Kind Code <sup>2</sup> (if known)			
NP		US- 4,183,056	01-08-1980	Evans et al.	
		US- 4,253,108	02-24-1981	Engel	
		US- 4,298,884	11-03-1981	Reneau	
		US- 4,321,635	03-23-1982	Tsuyuguchi	
		US- 4,324,402	04-13-1982	Klose	
		US- 4,520,404	05-28-1985	Von Kohom	
		US- 4,729,044	03-01-1988	Kiesel	
		US- 5,012,334	04-30-1991	Etra	
		US- 5,027,400	06-25-1991	Baji et al.	
		US- 5,101,364	03-31-1992	Davenport et al.	
		US- 5,109,482	04-28-1992	Bohrman	
		US- 5,200,825	04-06-1993	Perine	
		US- 5,222,924	06-29-1993	Shin et al.	
		US- 5,241,671	08-31-1993	Reed et al.	
		US- 5,288,069	02-22-1994	Matsumoto	
		US- 5,333,091	07-26-1994	Iggulden et al.	
		US- 5,381,477	01-10-1995	Beyers, II et al.	
		US- 5,404,316	04-04-1995	Klingler et al.	
		US- 5,410,344	04-25-1995	Graves et al.	
		US- 5,424,770	06-13-1995	Schmelzer et al.	
		US- 5,444,499	08-22-1995	Saitoh	
		US- 5,452,016	09-19-1995	Ohara et al.	
		US- 5,483,278	01-09-1996	Strubbe et al.	
		US- 5,521,841	05-28-1996	Arman et al.	
		US- 5,550,965	08-27-1996	Gabbe et al.	
		US- 5,600,781	02-04-1997	Root et al.	
		US- 5,635,982	06-03-1997	Zhang et al.	
		US- 5,654,769	08-05-1997	Ohara et al.	
		US- 5,664,227	09-02-1997	Mauldin et al.	
		US- 5,675,752	10-07-1997	Scott et al.	
		US- 5,694,163	12-02-1997	Harrison	
		US- 5,696,965	12-09-1997	Dedrick	
		US- 5,727,129	03-10-1998	Barrett et al.	
		US- 5,758,257	05-26-1998	Herz et al.	
		US- 5,758,259	05-26-1998	Lawler	
		US- 5,764,916	06-09-1998	Busey et al.	
		US- 5,778,108	07-07-1998	Coleman Jr.	
		US- 5,794,210	08-11-1998	Goldhaber et al.	
		US- 5,805,733	09-08-1998	Wang et al.	
		US- 5,809,426	09-15-1998	Radojeric et al.	
		US- 5,821,945	10-13-1998	Yeo et al.	
		US- 5,822,537	10-13-1998	Katseff et al.	
		US- 5,828,809	10-27-1998	Chang et al.	
		US- 5,828,839	10-27-1998	Moncreiff	
		US- 5,835,087	11-10-1998	Herz et al.	
		US- 5,848,396	12-08-1998	Gerace	
		US- 5,867,226	02-02-1999	Wehmeyer et al.	
NP		US- 5,875,107	02-23-1999	Nagai et al.	

NP		US- 5,877,821	03-02-1999	Newlin et al.	
		US- 5,878,222	03-02-1999	Harrison	
		US- 5,907,324	05-25-1999	Larson et al.	
		US- 5,913,030	06-15-1999	Lotspiech et al.	
		US- 5,920,300	07-06-1999	Yamazaki et al.	
		US- 5,920,360	07-06-1999	Coleman Jr.	
		US- 5,923,365	07-13-1999	Tamir et al.	
		US- 5,930,783	07-27-1999	Li et al.	
		US- 5,933,811	08-03-1999	Angles et al.	
		US- 5,945,988	08-31-1999	Williams et al.	
		US- 5,956,026	09-21-1999	Ratakonda	
		US- 5,959,681	09-28-1999	Cho	
		US- 5,959,697	09-28-1999	Coleman Jr.	
		US- 5,969,755	10-19-1999	Courtney	
		US- 5,977,964	11-02-1999	Williams et al.	
		US- 5,990,980	11-23-1999	Golin	
		US- 5,995,094	11-30-1999	Eggen et al.	
		US- 5,995,095	11-30-1999	Ratakonda	
		US- 6,005,565	12-21-1999	Legall et al.	
		US- 6,005,597	12-21-1999	Barrett et al.	
		US- 6,006,265	12-21-1999	Rangan et al.	
		US- 6,014,183	01-11-2000	Hoang	
		US- 6,020,883	02-01-2000	Herz et al.	
		US- 6,029,195	02-22-2000	Herz	
		US- 6,041,323	03-21-2000	Kubota	
		US- 6,049,821	04-11-2000	Theriault et al.	
		US- 6,055,018	04-25-2000	Swan	
		US- 6,060,167	05-09-2000	Morgan et al.	
		US- 6,064,385	05-16-2000	Sturgeon et al.	
		US- 6,070,167	05-30-2000	Qian et al.	
		US- 6,076,166	06-13-2000	Moshfeghi et al.	
		US- 6,078,917	06-20-2000	Paulsen Jr. et al.	
		US- 6,078,928	06-20-2000	Schnase et al.	
		US- 6,086,722	07-11-2000	Herz et al.	
		US- 6,100,941	08-08-2000	Dimitrova et al.	
		US- 6,115,709	09-05-2000	Gilmour et al.	
		US- 6,122,657	09-19-2000	Hoffman Jr. et al.	
		US- 6,128,624	10-03-2000	Papierniak et al.	
		US- 6,133,909	10-17-2000	Schein et al.	
		US- 6,137,486	10-24-2000	Yoshida et al.	
		US- 6,141,041	10-31-2000	Carlbon et al.	
		US- 6,141,060	10-31-2000	Honey et al.	
		US- 6,144,375	11-07-2000	Jain et al.	
		US- 6,161,142	12-12-2000	Wolfe et al.	
		US- 6,169,542	01-02-2001	Hooks et al.	
		US- 6,177,931	01-23-2001	Alexander et al.	
		US- 6,185,625	02-06-2001	Tso et al.	
		US- 6,195,497	02-27-2001	Nagasaka et al.	
		US- 6,198,767	03-06-2001	Greenfield et al.	
		US- 6,212,527	04-03-2001	Gustman	
		US- 6,216,129	04-10-2001	Eldering	
		US- 6,219,837	04-17-2001	Yeo et al.	
		US- 6,226,678	05-01-2001	Mattaway et al.	
		US- 6,230,172	05-08-2001	Pumaveja et al.	
		US- 6,233,289	05-15-2001	Fredrickson	
		US- 6,233,586	05-15-2001	Chang et al.	
		US- 6,236,395	05-22-2001	Sezan et al.	
		US- 6,240,406	05-29-2001	Tannen	
		US- 6,252,444	06-26-2001	Hoffberg	
		US- 6,275,268	08-14-2001	Ellis et al.	
		US- 6,286,140	09-04-2001	Ivanyi	
		US- 6,286,141	09-04-2001	Browne et al.	
		US- 6,298,482	10-02-2001	Seidman et al.	
NP		US- 6,304,665	10-16-2001	Cavallaro et al.	

NP		US- 6,311,189	10-30-2001	DeVries et al.	
		US- 6,317,718	11-13-2001	Fano	
		US- 6,317,881	11-13-2001	Shah-Nazaroff et al.	
		US- 6,320,624	11-20-2001	Ayer et al.	
		US- 6,339,842	01-15-2002	Fernandez et al.	
		US- 6,342,904	01-29-02	Vasudevan et al.	
		US- 6,363,160	03-26-2002	Bradski et al.	
		US- 6,370,504	04-09-2002	Zick et al.	
		US- 6,405,371	06-11-2002	Oosterhout et al.	
		US- 6,412,008	06-25-2002	Fields et al.	
		US- 6,418,168	07-09-2002	Narita	
		US- 6,421,680	07-16-2002	Kumhyr et al.	
		US- 6,425,133	07-23-2002	Leary	
		US- 6,426,761	07-30-2002	Kanevsky et al.	
		US- 6,426,974	07-30-2002	Takahashi et al.	
		US- 6,438,579	08-20-2002	Hosken	
		US- 6,439,572	08-27-2002	Bowen	
		US- 6,446,261	09-03-2002	Rosser	
		US- 6,487,390	11-26-2002	Virine et al.	
		US- 6,498,783	12-24-2002	Lin	
		US- 6,522,342	02-18-2003	Gagnon et al.	
		US- 6,530,082	03-04-2003	Del Sesto et al.	
		US- 6,535,639	03-18-2003	Uchiuchi et al.	
		US- 6,543,053	04-01-2003	Li et al.	
		US- 6,546,555	04-08-2003	Hjelsvold et al.	
		US- 6,549,643	04-15-2003	Toklu et al.	
		US- 6,553,178	04-22-2003	Abecassis	
		US- 6,556,767	04-29-2003	Okayama et al.	
		US- 6,571,279	05-27-2003	Herz et al.	
		US- 6,578,075	06-10-2003	Niemenen et al.	
		US- 6,581,207	06-17-2003	Sumita et al.	
		US- 6,587,127	07-01-2003	Leeke et al.	
		US- 6,593,936	07-15-2003	Huang et al.	
		US- 6,594,699	07-15-2003	Sahal et al.	
		US- 6,597,859	07-22-2003	Leinhart et al.	
		US- 6,611,876	08-26-2003	Barrett et al.	
		US- 6,614,987	09-02-2003	Ismail et al.	
		US- 6,658,095	12-02-2003	Yoakum et al.	
		US- 6,665,423	12-16-2003	Mehrotra et al.	
		US- 6,678,635	01-13-2004	Tovinkere et al.	
		US- 6,678,659	01-13-2004	Van Kommer	
		US- 6,681,395	01-20-2004	Nishi	
		US- 6,691,126	02-10-2004	Syeda-Mahmood	
		US- 6,697,523	02-24-2004	Divakaran et al.	
		US- 6,704,929	03-09-2004	Ozer et al.	
		US- 6,724,933	04-20-2004	Lin et al.	
		US- 6,754,904	06-22-2004	Cooper et al.	
		US- 6,754,906	06-22-2004	Finseth et al.	
		US- 6,766,362	07-20-2004	Miyasaka et al.	
		US- 6,774,917	08-10-2004	Foote et al.	
		US- 6,820,278	11-16-2004	Ellis	
		US- 6,829,781	12-07-2004	Bhagavath et al.	
		US- 6,868,440	03-15-2005	Gupta et al.	
		US- 6,925,455	08-02-2005	Gong et al.	
		US- 6,931,595	08-16-2005	Pan et al.	
		US- 6,970,510	11-29-2005	Wee et al.	
		US- 6,981,129	12-27-2005	Boggs et al.	
		US- 6,993,245	01-31-2006	Harville	
		US- 2001/0030664	10-18-2001	Shulman et al.	
		US- 2002/0013943	01-31-2002	Haberman et al.	
		US- 2002/0018594	02-14-2002	Xu et al.	
		US- 2002/0026345	02-28-2002	Juels	
		US- 2002/0079165	06-27-2002	Wolfe	
NP		US- 2002/0080162	06-27-2002	Pan et al.	

[illegible]

NON PATENT LITERATURE DOCUMENTS			
Examiner Initials *	Cite No. <sup>1</sup>	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T <sup>2</sup>
NP		"User Preference Description for MPEG-7," ISO/IEC JTC1/SC29/WG11, MPEG 99/MXXXX, Maui, Hawaii, December 1999, Pages 1-18.	
		"A Proposal for User Preference Descriptions in MPEG-7," ISO/IEC JTC1/SC29/WG11 M5222, MPEG 99, October 4, 1999, Pages 1-6.	
		PENG XU, et al., "Algorithms and System for High-Level Structure Analysis and Event Detection in Soccer Video," Columbia University, ADVENT - Technical Report #111, June 2001.	
		KEITH MILLAR AND DAVID WHITE, "A Schema for TV-Anytime: Segmentation Metadata AN195," NDS Contribution from MyTV, NDS Limited 2000, 27 pages.	
		KEITH MILLAR et al., "A Schema for TV-Anytime Segmentation Metadata AN195r1 myTV project," NDS Systems Division, NDS Limited 2000, 28 pages.	
		S.E. LEVINSON, L. R. RABINER, and M. M. SONDDHI, "An Introduction to the Application of the Theory of Probabilistic Functions of a Markov Process to Automatic Speech Recognition," Copyright 1983 American Telephone and Telegraph company, The Bell system Technical Journal, Vol. 62, No. 4, April 1983, pp. 1035-1074.	
		DENNIS YOW, et al., "Analysis and Presentation of Soccer Highlights from Digital Video," To appear in the Proceedings, Second Asian Conference on Computer Vision (ACCV '95).	
		DREW D. SAUR, et al. "Automated Analysis and Annotation of Basketball Video," SPIE Vol. 3022, pp. 176-187, 1997.	
		HAO PAN, et al., "Automatic Detection of Replay Segments in Broadcast Sports Programs by Detection of Logos in Scene Transitions," 2002 IEEE, pp. IV-3385 - IV-3388.	
		YIHONG GONG, et al., "Automatic Parsing of TV soccer Programs," 1995 IEEE, pp. 167 - 174.	
		JONATHAN D. COURTNEY, "Automatic Video Indexing via Object Motion Analysis," Pattern Recognition, Vol. 30, No. 4, pp. 607-625, 1997.	
		YONG RUI, et al. "Automatically Extracting Highlights for TV Baseball Programs," ACM Multimedia 2000 Los Angeles, CA, USA, pp. 105-115.	
		PADHRAIC SMYTH, "Belief Networks, Hidden Markov Models, and Markov Random Fields: a Unifying View," To appear in Pattern Recognition Letters, 1998, Information and Computer Science Department, University of California, Irvine, CA 92697-3425, March 20, 1998.	
		FRANCIS C. LI et al., "Browsing Digital Video," CHI 2000 April 1-6, 2000, CHI Letters volume 2 issue 1, pp. 169-176.	
		FRANKLIN REYNOLDS, et al. "Composite Capability/Preference Profiles (CC/PP): A user side framework for content negotiation," W3C Note July 27, 1999, <a href="http://www.w3.org/1999/07/NOTE-CCPP-19990727/">http://www.w3.org/1999/07/NOTE-CCPP-19990727/</a> , 15 pages.	
		T. LAMBROU, et al., "Classification of Audio Signals Using Statistical Features on Time and Wavelet Transform Domains," 1998 IEEE, pp. 3621 - 3624.	
		JOSHUA ALSPECTOR, et al., "Comparing Feature-based and Clique-based User Models for Movie Selection," Digital Libraries 98, Pittsburgh, PA, Copyright ACM 1998, pp. 11 - 18.	
		RAINER LIENHART, "Comparison of Automatic Shot Boundary Detection Algorithms," Part of the IS&T/SPIE conference on Storage and Retrieval for Image and Video Databases VII, San Jose, CA, January 1999, SPIE Vol. 3656, pp. 290 - 301.	
		JOHN CANNY, "A Computational Approach to Edge Detection," IEEE Transactions on Pattern Analysis and Machine Intelligence, Vol. PAMI-8, No. 6, November 1986, IEEE 1986, pp. 679 - 698.	
		RICHARD QIAN et al., "A Computational Approach to Semantic Event Detection," 1999 IEEE, pp. 200 - 206.	
		F. ARMAN, et al., "Content-based Browsing of Video Sequences," to appear in the Proceedings of ACM International Conference on Multimedia '94, October 15-20, San Francisco, CA, 7 pages.	
		HONGJIANG ZHANG, et al. "Content-Based Video Browsing Tools," SPIE Vol. 2417, 1995, pp. 389 - 398.	
		STEPHEN W. SMOLIAR, et al. "Content-Based Video Indexing and Retrieval," 1994 IEEE, pp. 62 - 72.	
		STEFAN EICKELER, et al., "Content-based Video Indexing of TV Broadcast News Using Hidden Markov Models," Proceedings of IEEE International Conference on Acoustics, Speech, and Signal Processing, Phoenix, AZ, 1999, 4 pages.	
NP		KATHY BOHRER and BOBBY HOLLAND, editors, "Customer Profile Exchange (CPEXchange) Specification," October 20, 2000, Version 1.0, International digital Enterprise Alliance, Inc. (IDEAlliance), pp. 1 - 127.	

NP		JANE HUNTER (DSTC Pty Ltd), Editor, "DDL Working Draft 3.0," ISO/IEC JTC1/SC29/WG11 N3391, MPEG 00/ May 2000 (Geneva), 23 pages.	
		VIKRANT KOBLA, et al. "Detection of Slow-Motion Replay Sequences for Identifying Sports Videos," Laboratory for Language and Media Processing, University of Maryland, College Park, MD 20742-3275, USA, 6 pages.	
		RICHARD J. QIAN, et al. "Description Schemes for Consumer Video Applications," Proposal ID 429, ISO/IEC JTC1/SC29/WG11 – MPEG-7 Proposal, February 1999.	
		ZHU LIU and QIAN HUANG, "Detecting News Reporting Using Audio/Visual Information," 1999 IEEE, pp. 324 – 328.	
		Y KAWAI, "Detection of Replay Scenes in Broadcasted Sports Video by focusing on digital Video Effects," IEICE (D-II), Vol. J84-D-II, No. 2, pp. 432-435, February 2001, (In Japanese), pp. 432 – 437.	
		VIKRANT KOBLA, et al., "Detection of Slow-Motion Replay Sequences for Identifying Sports Videos," Laboratory for Language and Media Processing, University of Maryland, College Park, MD 20742-3275, USA, pp. 135-140.	
		H. PAN, et al. "Detection of Slow-Motion Replay Segments in sports Video for Highlights Generation," Proceedings of IEEE International Conference on Acoustics, Speech, and signal Processing, Salt Lake City, UT, 2001, 4 pages.	
		ALAN E BELL, "The dynamic digital disk," IEEE Spectrum, October 1999, pp. 28-35.	
		BAOXIN LI and M. IBRAHIM SEZAN, "Event Detection and Summarization in Sports Video," Sharp Laboratories of America, 5750 NW Pacific Rim Blvd., Camas, WA 98607, USA, 5 pages.	
		MINERVA YEUNG, "Extracting Story Units from Long Programs for Video Browsing and Navigation," Proceedings of MULTIMEDIA 1996, 1996 IEEE, pp. 296 – 304.	
		BOON-LOCK YEO et al., "On the Extraction of DC Sequence from MPEG Compressed Video," 1995 IEEE, pp. 260 – 263.	
		FAP Specifications, MPEG-4 Compliant Facial Animation, <a href="http://www.dsp.dlst.unlge.lv/~pok/RESEARCH/MPEG/fapspec.htm">http://www.dsp.dlst.unlge.lv/~pok/RESEARCH/MPEG/fapspec.htm</a> , 4 pages.	
		FRANK R. KSCHISCHANG, et al., "Factor Graphs and the Sum-Product Algorithm," IEEE Transactions on Information Theory, vol. 47, No. 2, February 2001, pp. 498 – 519.	
		JOHN S. BORECZKY, et al. "A Hidden Markov Model Framework for Video Segmentation Using Audio and Image Features," Proceedings of IEEE International Conference on Acoustics, Speech, and Signal Processing, Seattle, WA, 1998, 4 pages.	
		WAYNE WOLF, "Hidden Markov Model Parsing of Video Programs," Proceedings of the 1997 IEEE International Conference on Acoustics, Speech, and Signal Processing (ICASSP '97), pp. 2609-2611.	
		BILGE GUNSEL, et al., "Hierarchical Temporal video Segmentation and content Characterization," Dept. of Electrical Engineering and Center for Electronic Imaging Systems, University of Rochester, Rochester, NY 14627, SPIE Vol. 3229, 1997.	
		M. R. NAPHADE, et al. "A High-Performance Shot Boundary Detection Algorithm Using Multiple Cues," Proceedings of IEEE International Conference on Image Processing, Chicago, IL, 1998, pp. 884 – 887.	
		JOSH BERNOFF, "How Cable TV Can Beat Satellite," WholeView TechStrategy Research, April 2002 Forrester Research, Inc., 400 Technology Square, Cambridge, MA 02139 USA	
		VIKRANT KOBLA, et al., "Identifying sports videos using replay, text, and camera motion features," Laboratory for Language and Media Processing, University of Maryland, College Park, MD 20742-3275, USA, Date Unknown.	
		B. B. CHAUDHURI, et al., "Improved fractal geometry based texture segmentation technique," IEE Proceedings-E, Vol. 140, No. 5, September 1993, pp. 233 – 241.	
		TOSHIO KAWASHIMA, et al., "Indexing of Baseball Telecast for Content-based Video Retrieval," Dept. of Information engineering, Hokkaido University, Kita-13, Nishi-8, Sapporo, 060-8628, Japan, 1998 IEEE, pp. 871 – 874.	
		NATHANIEL J. THURSTON, et al. "Intelligent Audience guidance: The New Paradigm in Television Navigation," Predictive Networks, Inc., February 21, 2002, 9 pages.	
		DULCE PONCELEON, et al. "Key to Effective Video Retrieval: Effective Cataloging and Browsing," ACM Multimedia '98, Bristol, UK, 1998, pp. 99 – 107.	
		HENRY LIEBERMAN, et al. "Let's Browse: A collaborative Web Browsing Agent," Massachusetts Institute of Technology, 20 Ames Street #E15-305, Cambridge, MA 02139, USA, Copyright ACM 1999, pp. 65 – 68.	
		NOBORU BABAGUCHI, et al., "Linking Live and Replay Scenes in Broadcasted Sports Video," ACM Multimedia Workshop, Marina Del Rey, CA, USA, Copyright ACM 2000, pp. 205 – 208.	
		GIRIDHARAN IYENGAR, et al., "Models for automatic classification of video sequences," SPIE Vol. 3312, 1997, pp. 216 – 227.	
NP		NEVENKA DIMITROVA, et al., "Motion Recovery for Video Content Classification," ACM Transactions on Information Systems, Vol. 13, No. 4, October 1995, pp. 408-439.	

NP		DDL GROUP, "MPEG-7 Description Definition Language Document V 2," ISO/IEC JTC1/SC29/WG11/N2997, October 1999/Melbourne, 56 pages.	
		DESCRIPTION SCHEME GROUP, "MPEG-7 Description Schemes (V0.5)," ISO/IEC JTC1/SC29/WG11 N2844, MPEG 99, July, 1999, Vancouver, pp. 1-59.	
		DESCRIPTION SCHEME GROUP, "MPEG-7 Generic AV Description Schemes (V0.7)," MPEG 99, October 1999, Melbourne.	
		AHG on MPEG7 MEDIA/META DSs and HARMONIZATION with other SCHEMES, "MPEG-7 Media/Meta DSs upgrade (V0.2)," ISO/IEC JTC1/SC29/WG11 MXXXX, MPEG 99 October, 1999, Melbourne, pp. 1-17.	
		PETER VAN BEEK, et al, Editors, "MPEG-7 Multimedia Description Schemes WD (Version 3.0)," ISO/IEC JTC 1/SC 29/WG 11/N3411, May 2000, Geneva.	
		PETER VAN BEEK, et al., Editors, "MPEG-7 Multimedia Description Schemes XM (Version 3.0)," ISO/IEC JTC 1/SC29/WG 11/N3410, May 2000, Geneva.	
		P. VAN BEEK et al., "MPEG-7 Requirements for Description of Users," ISO/IEC JTC1/SC29/WG11, MPEG99/4601, March 1999, 5 pages.	
		F. PEREIRA, Editor, "MPEG-7 Requirements Document V.9," ISO/IEC JTC1/SC29/WG11/N2859, July 1999/Vancouver (Canada).	
		SYLVIE JEANNIN, et al., Editors, "MPEG-7 Visual part of eXperimentation Model Version 6.0," ISO/IEC JTC1/SC29/WG11/N3398, Geneva, June 2000.	
		KAUSHAL KURAPATI, et al., "A Multi-Agent TV Recommender," Adaptive Systems Department, Philips Research Briarcliff, 345 Scarborough Rd., Briarcliff Manor, NY 10510, USA, Date Unknown.	
		JANE HUNTER (DSTC Pty Ltd.), "Text of ISO/IEC CD 15938-2 Information technology – Multimedia content description interface – Part 2 Description definition language," ISO/IEC JTC1/SC29/WG11 N3702, MPEG 00/3702, October 2000 (La Baule).	
		"Information Technology – Multimedia Content Description Interface – Part 5: Multimedia Description Schemes," ISO/IEC JTC 1/SC 29 N 3705, November 17, 2000, ISO/IEC CD 15938-5.	
		PETER VAN BEEK, et al., "Text of 15938-5 FCD Information Technology – Multimedia Content Description Interface – Part 5 Multimedia Description Schemes," ISO/IEC JTC 1/SC 29 N3966 March 12, 2001, 500 pages.	
		YAO WANG, et al., "Multimedia Content Analysis," IEEE Signal Processing Magazine, November 2000, pp. 12-35.	
		MARK T. MAYBURY, et al., "Multimedia Summaries of Broadcast News," Advanced Information Systems Center, The MITRE Corporation, 202 Burlington Road, Bedford, MA 01730, USA, pp. 442 – 449.	
		SHINICHI SATOH, et al., "Name-It: Association of Face and Name in Video," School of Computer Science, Carnegie Mellon University, Pittsburgh, PA 15213, December 20, 1996, 19 pages.	
		STUART J. GOLIN, "New metric to detect wipes and other gradual transitions in..." Part of the IS&T/SPIE Conference on Visual communications and Image Processing '99, San Jose, CA January 1999, SPIE Vol. 3653, pp. 1464 – 1474.	
		ULLAS GARGI, et al., "Transactions Letters: Performance Characterization of Video-Shot-Change Detection Methods," IEEE Transactions on Circuits and Systems for Video Technology, Vol. 10, No. 1, February 2000, 13 pages.	
		MICHAEL EHRMANTRAUT, et al., "The Personal Electronic Program guide – Towards the Pre-selection of Individual TV Programs," 1996 ACM, pp. 243 – 250.	
		MARC LIGHT, et al., "Personalized Multimedia Information Access," Communications of the ACM, Vol. 45, No. 5, May 2002, pp. 54 – 59.	
		KYOUNGRO YOON, et al., "Proposal of Usage History DS," ISO/IEC JTC1/SC29/WG11, MPEG00/M6259, July 2000, Beijing.	
		MICHAEL T. CHAN, et al., "Real-Time Lip Tracking and Bimodal Continuous Speech Recognition," Rockwell Science Center, 1049 Camino Dos Rios, Thousand Oaks, CA 91360, 6 pages, date unknown.	
		BOON-LOCK YEO, et al., "Retrieving and Visualizing Video," Communications of the ACM, December 1997, Vol. 40, No. 12, pp. 43 – 52.	
		H.B. LU, et al., "Robust Gradual Scene Change Detection," Proceedings of IEEE International Conference on Image Processing, Kobe, Japan, 1999, 5 pages.	
		RICHARD J. QIAN, et al., "A Robust Real-Time Face Tracking Algorithm," Sharp Laboratories of America, 5750 N.W. Pacific Rim Blvd., Camas, WA 98607, 1998 IEEE, pp. 131-135.	
		LEXING LIE, "Segmentation and Event Detection in Soccer Audio," EE 6820 Project, Soccer Audio, May 15, 2001, 9 pages.	
NP		RICCARDO LEONARDI, et al., "Content-Based Multimedia Indexing and Retrieval: Semantic Indexing of Multimedia Documents," IEEE 2002, pp. 44 – 51.	

NP		R. W. PICARD, "A Society of Models for Video and Image Libraries," IBM Systems Journal, Vol. 35, Nos. 3 & 4, 1996, pp. 292 – 312.	
		ALBERTO DEL BIMBO, et al., "A Spatial Logic for Symbolic Description of Image Contents," Journal of Visual Languages and Computing (1994) 5, pp. 267-286.	
		JIN-SOO LEE, et al. Editors, "Specification of The UsageHistory DS," ISO/IEC JTC 1/SC 29/WG 11/M5748, March 2000, Noordwijkerhout, pp. 1-6.	
		LEXING XIE, et al., "Structure Analysis of Soccer Video with Hidden Markov Models," Department of Electrical Engineering, Columbia University, New York, NY, 4 pages.	
		SELIM AKSOY, et al., "Textural Features for Image Database Retrieval," Intelligent Systems Laboratory, Department of Electrical Engineering, University of Washington, Seattle, WA 98195-2500, 5 pages.	
		B. S. MANJUNATH, et al., "Texture Features for Browsing and Retrieval of Image Data," IEEE Transactions on Pattern Analysis and Machine Intelligence, vol. 18, No. 8, August 1996, pp. 837 – 842.	
		RICHARD W. CONNERS, et al., "A Theoretical comparison of Texture Algorithms," IEEE Transactions on Pattern Analysis and Machine Intelligence, vol., PAMI-2, No. 3, May 1980, pp. 204 – 222.	
		NOBORU BABAGUCHI, "Towards Abstracting Sports Video by Highlights," ISIR, Osaka University, Ibaraki, Osaka 567-0047, Japan, 2000 IEEE, pp. 1519 – 1522.	
		STEPHEN S. INTILLE, "Tracking Using a Local Closed-World Assumption: Tracking in the Football Domain," MIT Media Lab Perceptual computing group Technical Report No. 296, pp. 1-62	
		LAWRENCE R. RABINER, "A Tutorial on Hidden Markov Models and Selected Applications in Speech Recognition," Proceedings of the IEEE, Vol. 77, No. 2, February 1989, pp. 257 – 286.	
		JIM STROUD, "TV Personalization: A Key Component of Interactive TV," The Carmel Group, 2001, 9 pages.	
		TED LEWIS, "UbiNet: The Ubiquitous Internet Will Be Wireless," DaimlerChrysler Research & Technology North America, 3 pages, date unknown.	
		RICHARD O. DUDA et al., "Use of the Hough Transformation To Detect Lines and Curves in Pictures," Communications of the ACM, January 1972, Volume 15, Number 1, pp. 11-15.	
		"User Preference Descriptions for MPEG-7," ISO/IEC JTC1/SC29/WG11, MPEG 99/MXXXX, Maui, Hawaii, December 1999, pp. 1-18.	
		RAINER LIENHART, et al., "Video Abstracting," Communications of the ACM, December 1997/ Vol. 40, No. 12, pp. 55 – 62.	
		SHINGO UCHIHASHI, et al., "Video Manga: Generating Semantically Meaningful Video Summaries," FX Palo Alto Laboratory, 3400 Hillview Avenue, Palo Alto, CA 94304, USA, pp. 383 – 392.	
		MICHAEL A. SMITH, et al., "Video Skimming for Quick Browsing based on Audio and Image Characterization," School of Computer Science, Carnegie Mellon University, Pittsburgh, PA 15213, July 30, 1995, 24 pages.	
		DANIEL DEMENTHON, et al., "Video summarization by Curve Simplification," Language and Media Processing (LAMP), University of Maryland, College Park, MD 20742-3275, 1998 ACM, pp. 211 – 218.	
		CHUNG-LIN HUANG, et al., "Video summarization using Hidden Markov Model," Electrical Engineering Department, National Tsing-Hua University, Hsin-Chu, Taiwan, ROC, 2001 IEEE, pp. 473 – 477.	
		YIHONG GONG, et al., "Video Summarization Using Singular Value Decomposition," C&C Research laboratories, NEC USA, Inc. 110 Rio Robles, San Jose, CA 95134, USA, 2000 IEEE, 7 pages.	
		YIHONG GONG, et al., "Video Summarization with Minimal Visual Content Redundancies," C&C Research Laboratories, NEC USA, Inc., 110 Rio Robles, San Jose, CA 95134, USA, 2001 IEEE, pp. 362 – 365.	
		MINERVA M. YEUNG, et al., "Video visualization for Compact Presentation and Fast Browsing of Pictorial Content," IEEE Transactions on circuits and Systems for Video Technology, vol. 7, No. 5, October 1997, pp. 771 – 785.	
		STEPHEN S. INTILLE, et al., "Visual Tracking Using closed-Worlds," MIT Media Laboratory Perceptual computing Section Technical Report No. 294, November 1994, pp. 1 – 18.	
		LESZEK CIEPLINSKI, et al. "Visual Working Draft 3.0," ISO/IEC JTC1/SC29/WG11/N3399, June 2000 (Geneva), 92 pages.	
		SUNGHOON CHOI, et al., "Where are the ball and players?: Soccer Game Analysis with Color-based Tracking and Image Mosaik," Dept. of EE, Pohang University of Science and Technology, San 31 Hyoja Dong, Pohang, 790-784, Republic of Korea, pp. 1-15.	
		<a href="http://web.archive.org/web/20001017172449/http://www.pvi-inc.com/">http://web.archive.org/web/20001017172449/http://www.pvi-inc.com/</a>	
NP		DAVID BEECH, et al., editors, "XML Schema Part 1: Structures," <a href="http://www.w3.org/1999/05/06-xmlschema-1/">http://www.w3.org/1999/05/06-xmlschema-1/</a> , W3C Working Draft, May 6, 1999, 67 pages.	



NP	PAUL V. BIRCH, et al., editors, "SML Schema Part 2: Datatypes, World Wide Web Consortium Working Draft," May 6, 1999, <a href="http://www.w3.org/1999/05/06-xml/schema-2/">http://www.w3.org/1999/05/06-xml/schema-2/</a> , 37 pages.	
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